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## 11. Palindromic Square

**Program Name:** Square.java

**Input File:** square.dat

A palindromic integer reads the same forwards or backwards. All single digit integers are palindromic. Some palindromic integers are more interesting than others. For example, the palindromic integer 595 can be expressed as the sum of consecutive squares:  $6^2 + 7^2 + 8^2 + 9^2 + 10^2 + 11^2 + 12^2$ .

In this problem you are going to determine if a given integer is palindromic and if it is, whether it can be expressed as the sum of two or more consecutive squares.

### Input

The input file will contain N integers, one integer per line ( $1 < N < 20$ ). Each integer n on a given line will be in the range  $1 < n < 1000$ .

### Output

For each integer you will print YES if it is palindromic and can be expressed as the sum of two or more consecutive square numbers or NO otherwise.

### Sample Input

```
66
101
434
500
595
```

### Sample Output

```
NO
NO
YES
NO
YES
```